EXHIBIT 1
(Filed Under Seal)

EXHIBIT 2

UNITED STATES DISTRICT COURT

DISTRICT OF ARIZONA

IN RE BARD IVC FILTERS PRODUCTS LIABILITY LITIGATION,

NO. MD-15-02641-PHX-DGC

DO NOT DISCLOSE

SUBJECT TO FURTHER CONFIDENTIALITY REVIEW

VIDEOTAPED DEPOSITION

- of -

CHRISTOPHER S. MORRIS, M.D.

taken on behalf of the Plaintiffs on Tuesday, July 25, 2017, at the Courtyard by Marriott, 25 Cherry Street, Burlington, Vermont, commencing at 9:08 AM.

VIDEO TECHNICIAN: DEVYN MULHOLLAND

COURT REPORTER: JOHANNA MASSÉ, RMR, CRR

you met with Mr. Rogers on -- here in Burlington, Vermont, for four hours?

A. Yes.

Q. And between July 18 and July 24, did you review any additional materials?

A. A few depositions. Several.

Q. And did you review anything else?

A. No.

Q. So the total number of time that you spent preparing for the class action/MDL litigation from May 18, 2017, to July 19, 2017, was a total of -- subtotal of 41 hours in that time period?

A. Well, just the MDL, yes.

Q. And then for the Lisa -- for the expert review of the Lisa Hyde case, you spent another 32 hours?

A. Yes.

Q. Okay. And then for the expert review of the Carol Kruse case, you spent another 35.5 hours; is that correct?

A. Correct.

Q. So in the two-month time period, you spent a total of 108.5 hours at $500 an hour --

A. Yes.

Q. -- is that correct?

So you were paid $54,250 --

A. Yes.

Q. -- for that period of time?

A. Yes.

Q. Then going back in time before that, from February 25 to -- '17, to May 8, '17, that invoice is on Exhibit No. 983; is that correct?

A. Yes.

Q. Okay. And then that is -- refers to which case?

A. This would have been beginning with the class action and then continuing on into the MDL report.

Q. Okay. And so there were -- where it's referred to as "Expert Report revision" on February 25, 2017; February 26, 2017; March 4, 2017; March 5, 2017, that all has to do with the -- with which report?

A. That would have -- those early ones would have been the class action. At that point I didn't even know there was an MDL action, so --

Q. And then -- okay. And then there's references to your conversations with both Mr. Rogers and Brandee Kowalzyk; is that correct?

A. Yes.

Q. And you -- and they were working on the class

action, correct?

A. As well as the MDL eventually.

Q. Okay. And then the Trerotola deposition review, Venbrux deposition review, Lynch deposition review were all the depositions that were taken around that time; is that correct?

A. I think they were earlier, but I honestly don't remember if they were part of the class action or the MDL, to tell you the truth.

Q. Okay. And then you reviewed the rebuttal reports of Drs. Vogelzang, Eisenberg, and Hertz?

A. I'm looking to see where you're --

Q. Okay. I'm still on -- on Exhibit 983.

MR. ROGERS: It's 4/15/17, Chris.

Q. Right. And I'm referring to --

A. Oh, 4 -- okay. Yes.

Q. Yes. April 15, 2017. You had a call with Mr. Rogers on April 13, 2017, for an hour. Then you looked at those three reports. Then you had another call with him the next day -- or, rather, a week later, April 26, 2017, correct?

A. Yes.

Q. Then you met with him on May 2, 2017; you had another call with him on May 5, 2017; and then met with

him again on May 8, 2017.

A. Yes.

Q. Okay. On May 8, 2017, you also met with Philip Busman and Jim Rogers in Boston. Who's Philip Busman?

A. He -- I know he's also with Nelson Mullins, so he's a lawyer.

Q. And then on January 30, 2017, on the next page it refers to a "Medical record and image review of Michael King."

A. Yeah.

Q. And that has nothing to do with the MDL?

A. Right. That's an error. That should not be there.

Q. And then on February 1st, 2017, there's a telephone call with Dennis Hom, Kate Helm, and Jim Rogers. Does that have to do with the class action?

A. No.

Q. Okay. So that's also an error?

A. That's an error, yeah.

Q. And that should not be there?

A. Right.

MR. ROGERS: And just for the record, Wendy, that -- I didn't realize that was on there, but that's

also a consultation that we probably should have redacted out of here.

MS. FLEISHMAN: Okay.

MR. ROGERS: So --

MS. FLEISHMAN: So let's agree to cull out that reference.

MR. ROGERS: That's fine. I just don't want to waive anything by sitting here like a bump on a log.

MS. FLEISHMAN: No, no. That's fine. We'll just -- we'll just -- when we -- when we take a break, let's just take that page off of that exhibit.

MR. ROGERS: Sounds great. Thank you.

MS. FLEISHMAN: Okay?

Q. With respect to the -- Exhibit 982, is that -- that is an invoice from November 17, 2016, to February 21, 2017?

A. Yes.

Q. Okay. And those are reviews of different medical records of different individuals; is that correct?

A. Correct.

Q. And -- and also reviews of certain deposition, right?

A. Some of the plaintiffs, yes.

Q. And in addition to that, there are some imaging reviews?
A. Yes.
Q. And then you say "Generation of initial draft individual Expert Reports on class representatives: Washington, Tomlin, Holt, Meeks, Barraza, Lester, Messner, Peck, Mosher, Flournay, and Mims."
A. Correct.
Q. Okay. And that was 20 hours?
A. Yes.
Q. And did you draft those reports?
A. Yes, I did.
Q. During that time period?
A. Yes.
Q. And then you say "Generation of initial draft overall Expert Report." Do you refer -- does that mean the MDL report?
A. No. That's the original class action general report.
Q. Okay. And then you also then reference another meeting with Nelson Mullins lawyers Jim Rogers and Brandee Kowalzyk.
A. Yes.
Q. And then you again revise -- okay. So you met

them on January 10, 2017, and then a week later you revised the reports.

A. Yes.

Q. And then again the next -- so January 21, '17, and 22, '17, you spent another nine hours revising those reports?

A. Yes.

Q. Okay. Then you reviewed Dr. Stavropoulos' deposition --

A. Yes.

Q. -- at that point?

And then after reviewing that deposition, did you add anything to the reports?

A. Not based on his deposition, no.

Q. And then you met again with the Nelson Mullins lawyers for six hours on February 14?

A. Yes.

Q. And then you reviewed the depositions of Drs. Hertz, Dr. Bates, and Dr. Eisenberg; is that right?

A. Yes.

Q. So you spent two and a half hours looking at Dr. Hertz's deposition?

A. Yes.

Q. You only spent half an hour looking at Dr.

Bates'?

A. It was very short.

Q. And then four hours looking at Dr. Eisenberg's deposition?

A. That was a little more thorough, and I had to read that a little more carefully.

Q. And then you made revisions to your overall expert report. Was that the -- that was the second report?

A. Yes.

Q. Okay. And then you had a conference call again, I assume, with Nelson Mullins. It just says "Conference call 2/23/17" for an hour and a half. Do you know who that call was with?

A. Can I change my last answer? I think that was still the class action report when I revised it on 2/18 and 2/19.

Q. So you spent nine hours on 2/18 and 2/19 revising that report, and then you spent -- did second revisions of the 11 draft class individual representative reports also on February 19 for another hour --

A. Yes.

Q. -- is that right?

A. Yes.
Q. And then you had a call with someone on February 23rd, '17.
A. Right.
Q. And do you know who that call was with?
A. It would have been with Jim Rogers, but I don't -- I don't know why I omitted putting his name in there, but all my calls have been with Jim. Yes. So that would have had to have been Jim Rogers.
Q. And how do you keep your time? Do you just write it down and then save it --
A. Yeah. I keep it on paper. I have -- and then any event that I do, I just write down exactly how many hours it took me to do that, and so it's a paper recording.
Q. And then you provide it to Nelson Mullins and they typed it?
A. In an invoice periodically.
MR. ROGERS: No.
A. No. I typed -- I typed these invoices up.
Q. Oh. Oh, okay. So then when you created this list of materials, this -- this list of materials reflects the medical records that you reviewed during that period?

A. Yes.
Q. And --
MR. ROGERS: Here's the official one.
THE WITNESS: Okay.
MR. ROGERS: Chris, hand me those. I'm just trying to keep all these in order. Thanks.
Q. The deposition list at page 12 --
A. Okay.
Q. -- does not -- is not the same as your invoice.
A. I didn't read all those depositions.
Q. Okay. So there's -- but, like, on page -- on Exhibit No. 982, right --
MR. ROGERS: Hang on. Let me fish it out.
Q. Okay. It's the -- it's the invoice 11/17/2016 to February 21, 2017.
MR. ROGERS: Here you go.
THE WITNESS: Okay.
Q. Right? So there's a "Medical record review Diane Washington" and then there's a "Deposition review Diane Washington" for three and a half hours.
A. Yes.
Q. But Diane Washington's deposition's not referenced in your deposition list on page 12 of

Exhibit 980.

A. These are all experts, of course. I don't know if she's -- I don't know if her deposition's in --

MR. ROGERS: Yeah. It's on page 1.

THE WITNESS: Page 1.

MR. ROGERS: And, Wendy, those aren't specifically identified as depositions, but where it says "Case Specific Materials" Plaintiff, Maria Barraza, et cetera, those are the depositions.

MS. FLEISHMAN: Okay.

Q. So where it says "Case Specific Materials," these are the list of depositions that you reviewed for these plaintiffs; is that --

A. I'd have to go through my invoice to make sure each one of those had a deposition, but if that -- if they match up, then yes, I read those depositions.

Q. Okay. So when you have "Case Specific Materials," what is intended to be included in the case-specific materials in that section of the materials reviewed?

A. I think primarily depositions. There was also the original complaint. I read that. And then the second amended class action complaint. I briefly perused the discovery responses. I don't think I

really spent much time on the responses.

Q. And then you reviewed the medical records -- the medical records and radiology imaging are set forth starting at page 1 and go on through page -- up to the end of page 11; is that right?

A. Yes.

Q. Okay. So those are the imaging records and the medical records; is that right?

A. Correct.

Q. And then you also have medical records summaries.

A. Yes.

Q. Okay. Those are not referred to in either list; is that correct?

A. Those may be case-specific materials as well, because each patient had a summary that was taken verbatim from the medical records, so I used that as a study guide, and I -- I would classify that as case-specific materials for each patient -- for each plaintiff.

Q. Okay. And you brought those with you today?

A. No.

MR. ROGERS: Yeah. They're here.

THE WITNESS: Oh, on thumb drive?

MS. FLEISHMAN: They're here?
MR. ROGERS: Yeah.
THE WITNESS: I'm sorry.
MR. ROGERS: Yeah.
MS. FLEISHMAN: Okay. So let's mark those, if that's okay.
MR. ROGERS: Okay. I don't know where they are.
MS. FLEISHMAN: All right. Let's take a short break and just find them, please.
THE VIDEOGRAPHER: The time is 10:13 AM. We're off the record.
(A recess was taken.)
(Deposition Exhibit No. 985 was marked for identification.)
THE VIDEOGRAPHER: We're back on the record at 10:23 AM.
BY MS. FLEISHMAN:
Q. Doctor, we've marked as Exhibit --
MR. ROTMAN: Cronin. Cronin.
MS. FLEISHMAN: I'm sorry?
MR. ROGERS: Sorry. Steve was going to be driven crazy until he thought of something, and I know how that feels.

A. Yes.

Q. What level of certainty did you apply to your opinions?

MR. ROGERS: Object to the form.

You can respond.

A. I don't know really how to answer that question. I think that's more of a legal term, as far as I can tell, but I approached this litigation the same way I practice interventional radiology on a daily basis. I always seek the truth, number one. I use many factors to help render my opinions. That includes first and foremost my personal experience, which I consider large. I also review the medical literature, the pertinent medical literature, of which there's not a lot of Level I or Level II evidence related to IVC filters, unfortunately, and I'm -- I'm part of that problem. I've contributed to the Level III and below evidence as well.

But I still use the literature to help me make -- make these decisions. I attend national meetings, talk with colleagues, participate in journal clubs, and honestly rely a lot on the FDA to -- to help make these decisions as well. So there are lots of different factors that go into it.

Q. Right. So --

A. My -- I approach the litigation using the same -- same methodology, essentially. So I would say a high level of certainty.

Q. Right. So I understand your answer was mostly about your methodology, your approach, what things you -- how you approach reaching a decision, and I'm -- and I think the last part of your answer where you said "so I would say a high level of certainty," that's really what I was getting after with my question is what level of certainty, and you said a high level of certainty.

So my question follow-up on that is, Did you --

A. I was going to say the reason I said all those is because if I just relied on a hunch or what my pulmonology colleague told -- told me that had never placed a filter in his life, that methodology would lead me to have less of a high level of certainty.

Q. Of course.

A. I might have a low -- so that's why I had to give you the background on how I know that I reached a high level of certainty in my opinions.

Q. Yes. And so if you were to put a numerical

quantification to "high level of certainty," would it be -- what would it be, approximately?

MR. ROGERS: Object -- object to the form.

A. That is a very difficult question to answer, quant- --

Q. You're getting paid $500 an hour to answer hard questions.

A. Well, yeah.

MR. ROGERS: Object to the form. That's not the definition --

MR. ROTMAN: I'll strike that.

MR. ROGERS: -- of what makes a question acceptable.

MR. ROTMAN: I'll strike that. I'll strike that.

Q. Maybe you can't answer it.

A. I mean, you know, the -- so --

Q. What level of --

A. -- I have to -- I have to answer that difficult question with a difficult answer. And, you know, we were talking on a break a little while ago about memory issues. My -- my benchmark for 100 percent certain medical science, so to speak my touchstone, is my brother, who I'm very close to, who's

a top ten neuroscience researcher specializing in Alzheimer's and memory disorders, so I gauge that as being 100 percent certain. He has $50 million in grants. He's the quintessential medical scientist that relies on Level I and Level II evidence. So when I compare his body of work, which I know -- which I've been following my entire life -- again, he's -- you know, he's very close to me and -- and I really respect his degree of scientific validity. When I compare that to the literature that's available regarding IVC filters, there's basically no -- no comparison, so how can I make 100 percent certain opinions based on literature which is less than Level I or Level II evidence?

Q. Understood. And -- and so nevertheless, you have reached opinions --

A. Yes, I --

Q. -- and you had -- and in order to do that, you had to reach a certain point based on your review of the evidence where you had a high level of certainty; that's what you testified. And I'm trying to understand how to understand what you mean by "high level of certainty." So, for example, I asked you for a numerical and I don't -- and I didn't get an answer

to that.

A. And I can't answer that.

Q. And you can't answer that.

A. Right.

Q. So, you know, would -- would "high level" mean more than 80 percent certain?

MR. ROGERS: Object --

Q. Let me -- let me suggest that as a starting point.

MR. ROGERS: Object to the form. Asked and answered.

You can respond.

A. And your -- the question is related to all my opinions?

Q. Yeah. Your opinions --

A. Yeah.

Q. -- in this case.

A. I would say yes, I'm -- I'm more than a B -- B student, so it would be more than 80 percent, yes. I generally score more than 90 percent.

Q. So that's what you generally look for is more than 90 percent certainty for your opinions in this case?

A. Generally speaking, yes.

literature, that a number of experts in the field based on their own studies of their own patient populations have concluded that the data shows that the -- the length of time that retrievable filters are implanted affects the complication of the retrieval and the likelihood of a complication; you've seen that, right?

MR. ROGERS: Object to the form.

A. I have seen that stated. I agree with the first part. I'm not convinced about the second part of that.

Q. You're not convinced using your level of certainty standard of over 80 percent?

MR. ROGERS: Object to the form.

A. Because the literature does not support to a high level of certainty that the complication rate increases exponentially. It may increase linearly, and I think you're referring to exponentially, meaning that every additional time frame, that rate of complication increases, not just stays the same.

MR. ROTMAN: Did I lose my monitor?

MR. LEWIS: Oh, Wendy, can we pass that back? This one right here.

MS. FLEISHMAN: Oh, yes. Sure.

MR. ROGERS: Hey, Steve, not to interrupt, but

we'll never know that they even have a fragment until someone tells them based on a chest x-ray or some kind of scan that they have a fragment there, and in my experience, all of a sudden those patients then do develop symptoms because now they know they have a fragment.

Q. But as we established before, asymptomatic fractures and migrations can become life-threatening events?

A. Rarely.

Q. Rarely. In your opinion, rarely?

A. I emphasize rarely.

Q. Okay. Now, I want to -- I want to talk about how it could be that -- how it would present, this scenario that you describe where the patient could die from the -- from the needle in the heart, if you would, causing tamponade and bleeding and that -- that series of adverse events.

Let's assume a patient is at home with a Bard retrievable filter that was implanted eight years ago and -- this sequence of events in fact happened. And they're home, they're not in the hospital, they're not in a doctor's office, and they wake up dead; in other words, they -- this all happens and they die. Okay?

Q. Right. And you don't know as you sit here today whether that's happening all over the place every day or every week in this country and it's not being recognized but filter fractures are killing people and they're dying at home and nobody's connecting it to the filter?

MR. ROGERS: Object to -- object to the form and foundation.

You can respond.

Q. Did you just laugh?

A. Well, I'm trying to think of the scenario. I mean, that -- people die from many different reasons. That's, like, a negative question you're asking me, so how can I prove a negative if there's no evidence on a negative?

Q. You can just answer my question, which was, You don't know as you sit here today whether this is happening frequently and not being detected?

A. I don't know that --

MR. ROGERS: Object to the form.

Q. Right?

A. I don't know that it is; I don't know that it isn't.

Q. Right. And so you cannot say to a reasonable

degree of scientific certainty that this event is rare unless you know the answer to the question of whether it's recognized when it happens on a regular basis, right?

MR. ROGERS: Object to the form.

A. It's speculation.

Q. You don't know if it's rare or not, do you?

MR. ROGERS: Object to the form.

A. I -- that's really difficult to answer because we know from some of these observational studies that have filter fragments in their chest, the vast majority of them are asymptomatic and they're not reporting large numbers of deaths in their patient population, so --

Q. Now, in the middle paragraph of this Hull paper, you see that in addition to evaluating whether -- the condition of the filter, they were looking at these fractured filter parts under a scanning electron microscope, right?

A. Yes.

Q. And they did so and they made a determination that it looked like to them bending fatigue fractures, right?

A. That's what they say, yes.

certainty you have regarding an opinion?

A. No.

Q. And did you have difficulty doing that?

A. Yeah. That was a little bit difficult for me to answer. I have -- I have testified as an expert witness previously, and I was asked sort of a similar question, and the term was "more likely than not," so I always -- I always thought that that was, you know, 90 plus percent or greater, and it turns out by legal definition that's 51 percent versus 49 percent, so that's something I learned at that time, but I think that's the only other time I've encountered a question like that.

Q. So you're familiar with that medical-legal concept of opinion needing to be stated to a reasonable degree of medical certainty?

A. Yes.

Q. And is that what you were talking about that you're interpreting as being more than 50 percent?

A. Yeah. 51 percent.

Q. And so are all the opinions that you stated in your report and in your deposition in this case, are those all held to a reasonable degree of medical certainty?

EXHIBIT 3
(Filed Under Seal)

EXHIBIT 4

UNITED STATES DISTRICT COURT

DISTRICT OF ARIZONA

No. MD-15-02641-PHX-DGC

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IN RE BARD IVC FILTERS PRODUCTS

LIABILITY LITIGATION

****

DO NOT DISCLOSE

SUBJECT TO FURTHER CONFIDENTIALITY REVIEW

VIDEOTAPED DEPOSITION OF CLEMENT J. GRASSI, MD

Thursday, June 15, 2017

9:24 a.m.

Held At:

Nelson Mullins Riley & Scarborough LLP

One Post Office Square

Boston, Massachusetts

REPORTED BY:

Maureen O'Connor Pollard, RMR, CLR, CSR

and I have to try to think back over years of working with them, I have not retrieved a Bard recent device where I've seen a fracture, no.

THE VIDEOGRAPHER: Dr. Grassi, I'm getting some noise from the wire.

THE WITNESS: Sorry about that. Is that better?

THE VIDEOGRAPHER: That's great. It's just if you --

THE WITNESS: Thank you. Thanks for letting me know.

BY MR. ROTMAN:

Q. Have you ever implanted a Bard Recovery filter?

A. In the past, no, I don't believe I've used the Recovery personally.

Q. Have you ever implanted a Bard G2 filter?

A. Yes.

Q. How many?

A. I would have to only estimate. I would say ten to a dozen.

Q. And have you ever retrieved a Bard Recovery filter?

A. Yes. And perhaps one-third of the previous number?

Q. So the number would be what?

A. Say three to four filters, from memory.

Q. So you've retrieved about three Recoveries in your career?

A. Again, this would be based on memory from years back.

Q. You've implanted no Recoveries, and retrieved approximately three, from your memory, from years back, correct?

A. Well, I think you asked the question of me, if I'm correct, about G2 filters, is that true?

Q. Let's just make it clear since there's some confusion. Let's just talk about Recovery for now.

A. Okay.

Q. You've never implanted a Recovery filter, correct?

A. From memory, I don't remember Recovery. And I don't remember having retrieved a Recovery.

Q. Okay. So now let's go to the G2.

Have you implanted a G2; and if so, how many?

A. Yes. And again, it would be by memory an estimate. A dozen or more.

Q. And how many have you retrieved, if any?

A. By memory, four filters or more.

Q. And have you seen any fractures in any of the patients where you've either implanted or retrieved a G2?

MR. BROWN: Object to the form. Asked and answered.

A. I believe I answered that question. From memory, I don't remember having seen that.

BY MR. ROTMAN:

Q. And I understand you've never seen a fracture of a Bard Recovery filter in your own patients -- sorry. Strike that.

You have seen Recovery fractures from patients of other physicians in your hospital?

A. Well, of colleagues in general.

Q. Colleagues.

How many?

A. From memory, over the years, I can say that perhaps one or two cases were shown as examples by colleagues.

Q. Other than fracture, do you consider tilt to be a complication?

A. I consider tilt to be one aspect of many types of vena cava filters.

Q. I'm asking if you consider a tilt of any filter to be a complication.

A. I do not consider it to be a complication unless there is an adverse event with symptoms or signs in that particular patient.

Q. And do you consider a perforation to be a complication of an IVC filter?

A. A perforation, if it is of a moderate to severe nature, and where there are either adverse symptoms or signs in that patient would be considered a complication.

Q. So if there's no symptoms or signs in conjunction with a moderate to severe perforation, you do not consider that to be a complication of the filter?

A. I would say that specifically and in

the literature, penetration that is 3 millimeters or less is usually defined as different from perforation greater than 3 millimeters. So that if there were to be, for example, a moderate perforation but the patient had no adverse events, had no symptoms, we could say that that was an image-identified complication, but was not, obviously, a symptomatic complication for that patient because they had no adverse outcome.

Q. But you would consider it to be a complication of the device?

MR. BROWN: Object to form.

A. We could put it into that category, yes.

BY MR. ROTMAN:

Q. If it's a moderate to severe perforation without symptoms?

A. Correct, as compared to the more minor degree of a penetration.

Q. And have you ever seen a perforation of a Bard recovery filter?

A. I've seen them in cases, and displayed at medical meetings, and talked about with

colleagues.

Q. How many perforations of Bard Recovery filters have you seen?

A. Overall in the whole group?

Q. Bard Recovery.

A. Yes, in your question, Counselor, so that I can understand --

Q. How many Bard Recovery filter perforations have you seen?

A. When you say when I've seen, I assume you mean overall. And I would say that at scientific meetings, with colleagues, and just from practice experience, I have had a chance to see, that is see described, approximately five to six perforations.

Q. And how many in your own patients?

A. In my own patients, I remember one.

Q. So now we've got, I want to talk about -- do you consider a tilt without symptoms to be a complication of the device?

A. I do not consider that to be a complication because, as you know, tilt can be shown both in Bard devices and in other IVC filters, and may be of no clinical significance

for the patient.

Q. Well, that same explanation would apply to a fracture, correct?

A. It would if the fracture were identified by imaging alone, and the patient had no signs and no symptoms.

Q. So if you -- you would not consider that to be a complication of the device?

MR. BROWN: Object to the form.

A. To be fair to your question, I would consider that to be a complication which has been identified by imaging.

BY MR. ROTMAN:

Q. Yes.

And so, have you ever seen a Bard Recovery tilt complication?

MR. BROWN: Object to the form.

A. I have seen Bard Recovery filter tilting, yes.

BY MR. ROTMAN:

Q. How many times?

A. I would estimate approximately three times.

Q. Have you ever implanted a Bard G2X?

A. To be fair to your question, I would actually have to look back to records, because I don't hold that in memory, whether the particular filter was a G2X or a G2. And I would say that I really can't give you, to be fair, I can't give you an accurate answer to that question at this moment.

Q. Have you ever retrieved a G2X?

A. Really, the same answer to that.

Q. Have you ever implanted a Bard Eclipse?

A. Yes.

Q. How many?

A. For that filter, which is a more modern device, I would estimate 50 or more.

Q. About how many filters do you implant in a given year?

A. The number of filters will vary per year, as it does per month. For myself, it might be between 30 and 40 devices in a year, depending on the particular year.

Q. And that would be all filters, all manufacturers combined?

A. That's correct, all types.

Q. Do you know what period of time the Eclipse was on the market?

A. The Eclipse was on the market in the period around 2008 to 2009, and I could not give you an exact date range.

Q. Do you know what period of time, you know, whether it was a year or two years, three years, that the Eclipse was on the market?

A. Well, the Eclipse was not on the market, as I understand it, for a long period of time because there was the next iteration, the Meridian, that was introduced by Bard, and that filter was the device that we had subsequently used.

Q. So the answer to my question is? Was it one years, two years, three years, do you know?

A. For the Eclipse?

Q. Yes.

A. My impression from memory is that the Eclipse was in clinical use between a year and two years, as an estimate.

Q. In that one to two years where you would have implanted 30 to 40 filters of all

manufacturer types per year, you implanted 50 or more Eclipse devices?

MR. BROWN: Object to the form.

A. I'm sorry, I don't understand your question.

MR. ROTMAN: Could you reread it, please?

(Whereupon, the reporter read back the pending question.)

MR. BROWN: Same objection.

A. Well, I think that we're having a misunderstanding on the wording of the question. So when you had asked me how many Eclipse devices have you implanted, I gave you from memory an estimate number. Okay. And the exact number, to be fair, I would have to go back and check records.

BY MR. ROTMAN:

Q. Your estimate was 50. I didn't misstate that, right? That was what you testified as your estimate, right?

A. That was my approximation.

Q. And how many Eclipses have you retrieved?

A. Again, from memory as an approximation, eight or more filters.

Q. And have you ever had a patient with an Eclipse complication?

MR. BROWN: Object to the form.

A. Personally, no.

BY MR. ROTMAN:

Q. And have you ever implanted a Meridian?

A. By memory, and to the best of my recollection, yes.

Q. Approximately how many?

A. Again, the exact number would be something I would have to check records. I would say, as an estimate, 20 or more devices.

Q. What records would you be able to check to give you the information about the number of Meridians that you've implanted?

A. Well, that would be challenging, because one would have to go back to either medical records, specific patient records, or perhaps even consult the company if there were a product use invoice slip sent.

Q. How many Meridians have you retrieved?

A. Again, as an estimate, six or more devices.

Q. And have you ever seen a Meridian complication among your own patients?

MR. BROWN: Object to the form.

A. Personally, let's see, yes, I've seen a case in which in my own patients there was not a complication but there was, due to the indication for use in the superior vena cava, the arm processes not being in standard position within the vena cava.

BY MR. ROTMAN:

Q. Do you consider that to be a complication of the device?

MR. BROWN: Object to the form.

A. No, simply because the patient had severe embolus within the SVC, and was in a state where she might have died within the next two to four hours, and so the filter actually was lifesaving.

BY MR. ROTMAN:

Q. Have you ever implanted a Denali?

A. Yes.

Q. How many?

A. Again, as an estimate, 50 or more devices.

Q. And have you ever retrieved a Denali?

A. Yes. And I would say the estimate there would be six or more devices.

Q. And have you ever seen a Denali complication?

MR. BROWN: Object to the form.

A. Personally, no.

BY MR. ROTMAN:

Q. Have you ever conducted a study of the patients in any of the hospitals where you worked to assess the complications in IVC retrievable filters in those patient populations?

A. I've participated in studies with IVC permanent filters, but not retrievable ones.

Q. And have you ever proposed a study of retrievable filters in any of the hospitals in which you have been a staff radiologist to assess the status of the filters implanted in the patients in that institution?

MR. BROWN: Object to the form.

A. By the question, study, you're

mentioned as compared to there being only one that must explain all fractures?

A. My own personal opinion is that I have not yet encountered an explanation which has weight of evidence behind it. Whether it is connected with one factor or multifactorial, I really can't say. What I can say is it's my opinion that there has not been a mechanism which has yet been proven by the persons who have advanced it.

Q. When you say "proven," what level of certainty does it take in your -- according to your own standards that you're applying here to say something is proven?

MR. BROWN: Object to the form.

A. That's a difficult question, only because proof varies scientifically. For example, we could go back to some of Koch's postulates -- that's spelled K-O-C-H -- in which, medically speaking, if you have an offending agent, the methodology is to identify the offending agent, show that it causes a problem in the human, then take the offending agent and reintroduce it into the human and

A. I would say that the one that would fit for me --

MR. BROWN: Just object to the form.

You can answer.

A. The one that would fit for me would -- in consideration of the fact that this involves many patients, many devices which have already been implanted, and the protection against a very fearful disease, that is pulmonary embolus, that I would look for evidence where I felt certain beyond any reasonable doubt.

BY MR. ROTMAN:

Q. And is that the kind of evidence that you're applying for your opinions in this case?

A. Overall, yes.

Q. And on the issue of explanations for why the Bard retrievable filters fracture, are you aware of what steps Bard has taken to answer that question?

A. Yes, I know that Bard has improved, honed, and refined its various newer devices as time has progressed.

Q. But I'm asking a different question. I'm asking, what has Bard done to figure out why

and observe that there was a fracture. They observed a trend, but there's no way of knowing when the fracture occurred, and if in that particular patient the fracture occurred on day two after it was implanted, or if it occurred on the day before the filter was removed when they observed it.

So my own opinion is that further work has to be done on this particular subject before I'm convinced of that direct relationship.

Q. And again, you're using the word "convinced." Yes?

A. Yes.

Q. And this opinion of yours that more work needs to be done, you have not done that work yourself, have you?

A. No, I have not done it personally.

Q. You have not done any studies to evaluate whether the risk of complications increases with the increased duration of a filter being implanted, a Bard retrievable filter being implanted in a patient?

A. No, I haven't performed those specific research studies.